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**Derek Meyers**  
Curriculum Vitae

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**EDUCATION**

**2015** PhD Department of Physics, University of Arkansas, Physics  
**2012** MS Department of Physics, University of Arkansas, Physics  
**2009** BS Department of Physics, Michigan Technological University, Physics

**DISSERTATION**

**2015** “*Engineering the ground state of complex oxides*”, Department of Physics, University of Arkansas, Physics

**PROFESSIONAL EMPLOYMENT**

**2019-present** Assistant Professor, Physics Department, Oklahoma State University, Stillwater, Oklahoma

**2018-2019** Postdoctoral researcher, Lane Martin Group, Materials Science and Engineering Department, University of California, Berkeley

**2015-2018** Postdoctoral researcher, X-ray Scattering Group, Condensed Matter Physics and Materials Sciences Department, Brookhaven National Laboratory

**AWARDS AND HONORS**

**2014** Aubrey E. Harvey Graduate Research Award, Sigma Xi Society  
**2009-2013** Doctoral Academy Fellowship, University of Arkansas  
**2009** Graduated Cum Laude, Michigan Technological University

**INVITED TALKS**

**2019** “*Forging next generation materials through atomic layer engineering*”, State University of New York, Binghamton, Mar. 27<sup>th</sup>

**2019** “*Forging next generation materials through atomic layer engineering*”, Oklahoma State University, Mar. 7<sup>th</sup>

**2019** “*Forging next generation materials through atomic layer engineering*”, Wayne State University, Feb. 19<sup>th</sup>

**2019** “*Forging next generation materials through atomic layer engineering*”, College of William and Mary, Jan. 25<sup>th</sup>

- 2018** “*Leveraging atomic layering to engineer magnetic phenomena*”, Rutgers University, Laboratory for Surface Modification, Dec. 6<sup>th</sup>
- 2018** “*Illuminating rationally engineered complex oxides*”, Oak Ridge National Laboratory, Materials Science and Technology Division, Jan. 8<sup>th</sup>
- 2016** “*Low energy excitations in complex oxides investigated by resonant inelastic x-ray scattering*”, University of Tennessee, Department of Physics and Astronomy, Oct. 5<sup>th</sup>
- 2015** “*Rational engineering of complex oxide ground states*”, University of Illinois at Urbana-Champaign, Department of Physics and Astronomy, June 9<sup>th</sup>
- 2013** “*Shining light on complex oxides*”, Center for Integrated Nano Technologies User Conference, Sept 25<sup>th</sup>

## CONFERENCES AND DEPARTMENTAL TALKS

- 2019** “*How to create Franken-materials*”, Condensed Matter Physics Journal Club, Oklahoma State University
- 2012-2015, 2017-2019** March Meeting, American Physical Society
- 2014** “*Rational engineering of complex oxide ground states*”, Sigma Xi Society, University of Arkansas chapter

## TEACHING EXPERIENCE

- 2009-2011** Teaching Assistant, Department of Physics, University of Arkansas
- 2007** Teaching Assistant, Department of Physics, Michigan Technological University

## RESEARCH EXPERIENCE

- 2011-2015** Research Assistant, Department of Physics, University of Arkansas
- 2008-2009** Research Assistant, Department of Physics, Michigan Technological University

## SERVICE TO PROFESSION

- 2019-present** Review editor, Frontiers in Materials, Frontiers Media SA
- 2018** “*Session X09: Vacancies and Defects/Structure of Complex Oxide Heterostructures*”, Session Chair, American Physics Society March Meeting
- 2013-present** Reviewer for the following journals: Physical Review Letters, Physical Review B, Applied Physics Letters, Applied Surface Science, Journal of Physics: Condensed Matter, Journal of Physics D: Applied Physics

## DEPARTMENTAL AND UNIVERSITY SERVICE

- 2019** Up close event Physics booth, Oklahoma State University
- 2019** OKLSAMP poster judge, Oklahoma State University
- 2013-2015** Star Party events operating both an 8-inch Dobsonian reflector and a 127mm apochromatic refractor

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**2012-2014** 3 lab tours per year for the Physics Department open house for high school students  
**2012-2013** University of Arkansas Ideas Network of Biomedical Research Excellence (INBRE)  
**2012** Integrative Graduate Education and Research Training, “Krazy Materials”  
presentation

## MEMBERSHIPS

**2011-present** American Physical Society Member  
**2014-2015** Sigma Xi Member, University of Arkansas Chapter

## PUBLICATIONS

1. Ranjan Kumar Patel, **D. Meyers**, Xiaoran Liu, Prithwijit Mandal, M. Kareev, P. Shafer, J.-W. Kim, P. J. Ryan, S. Middey, and J. Chakhalian, Emergent behavior of LaNiO<sub>3</sub> in short-periodic nickelate superlattices, *APL Mater.* 8, 041113 (2020).
2. S. Middey, R. K. Patel, **D. Meyers**, P. Shafer, M. Kareev, J. W. Freeland, J.-W. Kim, P. J. Ryan and J. Chakhalian, *Probing Electronic and Magnetic Transitions of Short Periodic Nickelate Superlattices Using Synchrotron X-rays*, *Synch. Rad. News* 33, 25-29 (2020).
3. Jong-Woo Kim, Yongseong Choi, S. Middey, **D. Meyers**, J. Chakhalian, Padraic Shafer, H. Park, and Philip J. Ryan, *Direct Evidence of the Competing Nature between Electronic and Lattice Breathing Order in Rare-Earth Nickelates*, *Phys. Rev. Lett.* 124, 127601 (2020).
4. Abel Fernandez, Jieun Kim, **D. Meyers**, Sahar Saremi, and Lane W. Martin, *Finite-size effects in lead scandium tantalate relaxor thin films*, *Phys. Rev. B* 101, 094102 (2020).
5. Sahar Saremi, Jieun Kim, Anirban Ghosh, **D. Meyers**, and Lane W. Martin, *Defect-Induced (Dis)Order in Relaxor Ferroelectric Thin Films*, *Phys. Rev. Lett.* 123, 207602 (2019).
6. **D. Meyers**, Yue Cao, G. Fabbris, Neil J. Robinson, Lin Hao, C. Frederick, N. Traynor, J. Yang, Jiaqi Lin, M. H. Upton, D. Casa, Jong-Woo Kim, T. Gog, E. Karapetrova, Yongseong Choi, D. Haskel, P. J. Ryan, Lukas Horak, X. Liu, Jian Liu, and M. P. M. Dean, *Magnetism in artificial Ruddlesden-Popper iridates leveraged by structural distortions*, *Sci. Rep.* 9, 4263 (2019).
7. Y. Cao, D. G. Mazzone, **D. Meyers**, J. P. Hill, X. Liu, S. Wall and M. P. M. Dean, *Ultrafast dynamics of spin and orbital correlations in quantum materials: an energy- and momentum-resolved perspective*, *Phil. Trans. A R. Soc.* 377, 20170480 (2019).
8. Junyi Yang, Lin Hao, Peyton Nanney, Kyle Noordhoek, **D. Meyers**, Lukas Horak, Joshua Sanchez, Jiun-Haw Chu, Christie Nelson, Mark. P. M. Dean, and Jian Liu, *Epitaxial stabilization of Sr<sub>3</sub>Ir<sub>2</sub>O<sub>7</sub> thin films*, *Appl. Phys. Lett.* 114, 182401 (2019).
9. Lin Hao, **D. Meyers**, M. P. M. Dean, and Jian Liu, *Novel spin-orbit coupling driven emergent states in iridate-based heterostructures*, *J. Phys. Chem. Solids* 128, 39-53 (2019).
10. Frano, M. Bluschke, Z. Xu, B. Frandsen, Y. Lu, M. Yi, R. Marks, A. Mehta, V. Borzenets, **D.**

- Meyers**, M. P. M. Dean, F. Baiutti, J. Maier, G. Kim, G. Christiani, G. Logvenov, E. Benckiser, A. Keimer, and R. J. Birgeneau, “*Control of dopant crystallinity in electrochemically treated cuprate thin films*”, Phys. Rev. Mat. 3, 063803 (2019).
11. Lin Hao, Zhentao Wang, Junyi Yang, **D. Meyers**, Joshua Sanchez, Gilberto Fabbris, Yongseong Choi, Jong-Woo Kim, Daniel Haskel, Philip J. Ryan, Kipton Barros, Jiun-Haw Chu, M.P.M. Dean, Cristian D. Batista, and Jian Liu, “*Anomalous magnetoresistance due to longitudinal spin fluctuations in a  $J_{\text{eff}} = 1/2$  Mott semiconductor*”, Nat. Comm. 10, 5301 (2019).
  12. **D. Meyers**, Yue Cao, G. Fabbris, Lin Hao, C. Frederick, N. Traynor, J. Yang, Jiaqi Lin, E. Karapetrova, T. Schmitt, D. McNally, M. Dantz, Jian Liu, and M. P. M. Dean, *Decoupling carrier concentration and electron-phonon coupling in oxide heterostructures observed with resonant inelastic x-ray scattering*, Phys. Rev. Lett., 121, 236802 (2018).
  13. G. Fabbris, N. Jaouen, **D. Meyers**, J. Feng, J. D. Hoffman, R. Sutarto, S. G. Chiuzbăian, A. Bhattacharya, and M. P. M. Dean, *Emergent c-axis magnetic helix in manganite-nickelate superlattices*, Phys. Rev. B 98, 180401(R) (2018).
  14. S. Middey, **D. Meyers**, Ranjan Kumar Patel, X. Liu, M. Kareev, P. Shafer, J.-W. Kim, P. J. Ryan, and J. Chakhalian, *Phase engineering of rare earth nickelates by digital synthesis*, Appl. Phys. Lett. 113, 081602 (2018).
  15. H. Miao, T. T. Zhang, L. Wang, **D. Meyers**, A. H. Said, Y. L. Wang, Y. G. Shi, H. M. Weng, Z. Fang, M. P. M. Dean, *Observation of Double Weyl Phonons in Parity-Breaking FeSi*, Phys. Rev. Lett. 121, 035302 (2018).
  16. S. Middey, **D. Meyers**, Shashank Kumar Ojha, M. Kareev, X. Liu, Y. Cao, J. W. Freeland, J. Chakhalian, *Epitaxial strain modulated electronic properties of interface controlled nickelate superlattice*, Phys. Rev. B, 98, 045115 (2018)
  17. Lin Hao, **D. Meyers**, Hidemaro Suwa, Junyi Yang, Clayton Frederick, Tamene R. Dasa, Gilberto Fabbris, Lukas Horak, Dominik Kriegner, Yongseong Choi, Jong-Woo Kim, Daniel Haskel, Philip J. Ryan, Haixuan Xu, Cristian D. Batista, M. P. M. Dean, and Jian Liu, *Giant magnetic response of a two-dimensional antiferromagnet*, Nature Physics 14, 806–810 (2018).
  18. H. Miao, D. Ishikawa, R. Heid, M. Le Tacon, G. Fabbris, **D. Meyers**, G. D. Gu, A. Q. R. Baron, and M. P. M. Dean, *Incommensurate phonon anomaly and the nature of charge density waves in cuprates*, Phys. Rev. X 8, 011008 (2018).
  19. S. Middey\*, **D. Meyers\***, M. Kareev, Yanwei Cao, X. Liu, P. Shafer, J. W. Freeland, J. W. Kim, P. J. Ryan, and J. Chakhalian, *Disentangled cooperative orderings in artificial rare-earth nickelates*, Phys. Rev. Lett. 120, 156801 (2018). [\* co-first authors]
  20. Yanwei Cao, Zhen Wang, Se Young Park, Yakun Yuan, Xiaoran Liu, Sergey M. Nikitin, Hirofumi Akamatsu, M. Kareev, S. Middey, **D. Meyers**, P. Thompson, P.J. Ryan, Padraic Shafer, A. N’Diaye, E. Arenholz, Venkatraman Gopalan, Yimei Zhu, Karin M. Rabe and J. Chakhalian, *Artificial two-dimensional polar metal at room temperature*, Nat. Comm. 9, 1547 (2018).

21. Y. L. Wang, G. Fabbris, **D. Meyers**, N. H. Sung, R. E. Baumbach, E. D. Baur, P. J. Ryan, J. W. Kim, X. R. Liu, M. P. M. Dean, G. Kotliar, and X. Dai, *On the possibility to detect multipolar order in  $URu_2Si_2$  by the electric quadrupolar transition of resonant elastic X-ray scattering*, Phys. Rev. B 96, 085146 (2017).
22. **D. Meyers**, H. Miao, A. C. Walter, V. Bisgoni, R. S. Springell, M. d' Astuto, M. Dantz, J. Pellicciari, H. Y. Huang, J. Okamoto, D. J. Huang, J. P. Hill, X. He, I. Bozovic, T. Schmitt, and M. P. M. Dean, *Doping dependence of the magnetic excitations in  $La_{2-x}Sr_xCuO_4$* , Phys. Rev. B 95, 075139 (2017).
23. Y. Cao, X. Liu, W. Xu, Wei-Guo Yin, **D. Meyers**, J. Kim, D. Casa, M. H. Upton, T. Gog, T. Berlijn, G. Alvarez, S. Yuan, J. Terzic, J. M. Tranquada, J. P. Hill, G. Cao, R. M. Konik, and M. P. M. Dean, *Giant spin gap and magnon localization in the disordered Heisenberg antiferromagnet  $Sr_2Ir_{1-x}Ru_xO_4$* , Phys. Rev. B 95, 121103(R) (2017).
24. G. Fabbris, **D. Meyers**, L. Xu, V. M. Katukuri, L. Hozoi, X. Liu, Z.-Y. Chen, J. Okamoto, T. Schmitt, A. Uldry, B. Delly, G. D. Gu, D. Prabhakaran, A. T. Boothroyd, J. van den Brink, D. J. Huang, and M. P. M. Dean, *Doping dependence of collective spin and orbital excitations in the spin-1 quantum antiferromagnet  $La_{2-x}Sr_xNiO_4$  observed by x-rays*, Phys. Rev. Lett. 118, 156402 (2017).
25. Lin Hao, **D. Meyers**, Clayton Frederick, Gilberto Fabbris, Junyi Yang, Nathan Traynor, Lukas Horak, Dominik Kriegner, Yongseong Choi, Jong-woo Kim, Daniel Haskel, Phil J. Ryan, M. P. M. Dean, and Jian Liu, *Two-dimensional  $J_{eff}=1/2$  antiferromagnetic insulator unraveled from interlayer exchange coupling in artificial perovskite iridate superlattices*, Phys. Rev. Lett. 119, 027204 (2017).
26. Jason D. Hoffman, Brian J. Kirby, Jihwan Kwon, Gilberto Fabbris, **D. Meyers**, John W. Freeland, Ivar Martin, Olle G. Heinonen, Paul Steadman, Hua Zhou, Christian M. Schlepütz, Mark P. M. Dean, Suzanne G. E. te Velthuis, Jian-Min Zuo, and Anand Bhattacharya, *Oscillatory Noncollinear Magnetism Induced by Interfacial Charge Transfer in Superlattices Composed of Metallic Oxides*, Phys. Rev. X 6, 041038 (2016).
27. Yanwei Cao, Se Young Park, Xiaoran Liu, D. Choudhury, S. Middey, **D. Meyers**, M. Kareev, P. Shafer, E. Arenholz, and J. Chakhalian, *Orbital configuration in  $CaTiO_3$  films on  $NdGaO_3$* , Appl. Phys. Lett. 109, 152905 (2016).
28. Q. Cui, J.-G. Cheng, W. Fan, A. E. Taylor, S. Calder, M. A. McGuire, J.-Q. Yan, **D. Meyers**, X. Li, Y. Q. Cai, Y. Y. Jiao, Y. Choi, D. Haskel, H. Gotou, Y. Uwatoko, J. Chakhalian, A. D. Christianson, S. Yunoki, J. B. Goodenough, and J.-S. Zhou, *Slater Insulator in Iridate Perovskites with Strong Spin-Orbit Coupling*, Phys. Rev. Lett. 117, 176603 (2016).
29. G. Fabbris, **D. Meyers**, J. Okamoto, J. Pellicciari, A. S. Disa, Y. Huang, Z.-Y. Chen, W. B. Wu, C. T. Chen, S. Ismail-Beigi, C. H. Ahn, F. J. Walker, D. J. Huang, T. Schmitt, and M. P. M. Dean, *Orbital Engineering in Nickelate Heterostructures Driven by Anisotropic Oxygen Hybridization rather than Orbital Energy Levels*, Phys. Rev. Lett. 117, 147401 (2016).

30. X. Liu, M. P. M. Dean, Z. Y. Meng, M. H. Upton, T. Qi, T. Gog, Y. Cao, J. Q. Lin, **D. Meyers**, H. Ding, G. Cao, and J. P. Hill, *Anisotropic softening of magnetic excitations in lightly electron-doped  $Sr_2IrO_4$* , Phys. Rev. B 93, 241102(R) (2016).
31. B. A. Gray, S. Middey, G. Conti, A. X. Gray, C.-T. Kuo, A. M. Kaiser, S. Ueda, K. Kobayashi, **D. Meyers**, M. Kareev, I. C. Tung, Jian Liu, C. S. Fadley, J. Chakhalian, and J. W. Freeland, *Superconductor to Mott insulator transition in  $YBa_2Cu_3O_7/LaCaMnO_3$  heterostructures*, Sci. Rep. 6, 33184 (2016).
32. Yanwei Cao, Xiaoran Liu, Padraic Shafer, Srimanta Middey, **D. Meyers**, Mikhail Kareev, Zhicheng Zhong, Jong-Woo Kim, Philip J Ryan, Elke Arenholz, and Jak Chakhalian, *Anomalous orbital structure in a spinel–perovskite interface*, NPJ Quant. Mat. 1, 16009 (2016).
33. **D. Meyers**, Jian Liu, J. W. Freeland, S. Middey, M. Kareev, Jihwan Kwon, J. M. Zuo, Yi-De Chuang, J. W. Kim, P. J. Ryan, and J. Chakhalian, *Pure electronic metal-insulator transition at the interface of complex oxides*, Sci. Rep. 6, 27934 (2016).
34. S. Middey, **D. Meyers**, D. Doennig, M. Kareev, X. Liu, Y. Cao, Zhenzhong Yang, Jinan Shi, Lin Gu, P. J. Ryan, R. Pentcheva, J.W. Freeland, and J. Chakhalian, *Mott Electrons in an Artificial Graphenelike Crystal of Rare-Earth Nickelate*, Phys. Rev. Lett. 116, 056801 (2016).
35. Yanwei Cao, Zhenzhong Yang, M. Kareev, Xiaoran Liu, **D. Meyers**, S. Middey, D. Choudhury, P. Shafer, Jiandong Guo, J.W. Freeland, E. Arenholz, Lin Gu, and J. Chakhalian, *Magnetic Interactions at the Nanoscale in Trilayer Titanates*, Phys. Rev. Lett. 116, 076802 (2016).
36. Yanwei Cao, Xiaoran Liu, M. Kareev, D. Choudhury, S. Middey, **D. Meyers**, J.-W. Kim, P.J. Ryan, J.W. Freeland and J. Chakhalian, *Engineered Mott ground state in a  $LaTiO_3/LaNiO_3$  heterostructure*, Nat. Comm. 7, 10418 (2016).
37. **D. Meyers**, S. Middey, M. Kareev, Jian Liu, J. W. Kim, P. Shafer, P. J. Ryan, and J. Chakhalian, *Charge order and antiferromagnetism in epitaxial ultrathin films of  $EuNiO_3$* , Phys. Rev. B 92, 235126 (2015)
38. D. Choudhury, P. Rivero, **D. Meyers**, X. Liu, Y. Cao, S. Middey, M. J. Whitaker, S. Barraza-Lopez, J. W. Freeland, M. Greenblatt, and J. Chakhalian, *Anomalous charge and negative-charge-transfer insulating state in cuprate chain compound  $KCuO_2$* , Phys. Rev. B 92, 201108(R) (2015).
39. M. H. Upton, Yongseong Choi, Hyowon Park, Jian Liu, **D. Meyers**, J. Chakhalian, S. Middey, Jong-Woo Kim, and Philip J. Ryan, *Novel Electronic Behavior Driving  $NdNiO_3$  Metal-Insulator Transition*, Phys. Rev. Lett. 115, 036401 (2015).
40. Yanwei Cao, P. Shafer, Xiaoran Liu, **D. Meyers**, M. Kareev, S. Middey, J. W. Freeland, E. Arenholz, and J. Chakhalian, *Magnetism and electronic structure of  $YTiO_3$  thin films*, Appl. Phys. Lett. 107, 112401 (2015).
41. Xiaoran Liu, D. Choudhury, Yanwei Cao, S. Middey, M. Kareev, **D. Meyers**, J.-W. Kim, P.

- Ryan, and J. Chakhalian, *Epitaxial growth of (1 1 1)-oriented spinel  $\text{CoCr}_2\text{O}_4/\text{Al}_2\text{O}_3$* , Appl. Phys. Lett. 106, 071603 (2015).
42. **D. Meyers**, S. Middey, J.-G. Cheng, Swarnakamal Mukherjee, B. A. Gray, Yanwei Cao, J.-S. Zhou, J. B. Goodenough, Yongseong Choi, D. Haskel, J. W. Freeland, T. Saha-Dasgupta, and J. Chakhalian, *Competition between heavy fermion and kondo interaction in isoelectronic A-site-ordered perovskites*, Nat. Comm. 5, 5818 (2014).
43. S. Middey, P. Rivero, **D. Meyers**, M. Kareev, X. Liu, Y. Cao, J. W. Freeland, S. Barraza-Lopez, and J. Chakhalian, *Polarity compensation in ultra-thin films of complex oxides: The case of a perovskite nickelate*, Sci. Reports 4, 6819 (2014).
44. Xiaoran Liu, M. Kareev, Yanwei Cao, Jian Liu, S. Middey, **D. Meyers**, J. W. Freeland, and J. Chakhalian, *Electronic and magnetic properties of (1 1 1)-oriented  $\text{CoCr}_2\text{O}_4$  epitaxial thin film*, Appl. Phys. Lett. 105, 042401 (2014).
45. S. Middey, M. Kareev, **D. Meyers**, X. Liu, Y. Cao, S. Tripathi, D. Yazici, M. B. Maple, P. J. Ryan, J. W. Freeland, and J. Chakhalian, *Epitaxial stabilization of ultrathin films of electron doped manganites*, Appl. Phys. Lett. 104, 202409 (2014).
46. M. Kareev, Yanwei Cao, Xiaoran Liu, S. Middey, **D. Meyers**, and J. Chakhalian, *Metallic conductance at the interface of tri-color titanate superlattices*, Appl. Phys. Lett. 103, 231605 (2013).
47. **D. Meyers**, Swarnakamal Mukherjee, J.-G. Cheng, S. Middey, J.-S. Zhou, J. B. Goodenough, B. A. Gray, J. W. Freeland, T. Saha-Dasgupta, and J. Chakhalian, *Zhang-Rice physics and anomalous copper states in A-site ordered perovskites*, Sci. Rep. 3, 1834 (2013).
48. E. J. Moon, A. Pimpinelli, B. A. Gray, M. Kareev, **D. Meyers**, and J. Chakhalian, *Strain-Controlled Epitaxial Stabilization in Ultrathin  $\text{LaNiO}_3$  Films Grown by Pulsed Laser Deposition*, Crys. Growth Des. (2013).
49. **D. Meyers**, E. J. Moon, M. Kareev, I. C. Tung, B. A. Gray, Jian Liu, M. J. Bedzyk, J. W. Freeland, and J. Chakhalian, *Epitaxial stabilization of ultra-thin films of  $\text{EuNiO}_3$* , J. Phys. D: Appl. Phys. 46, 385303 (2013).
50. **D. Meyers**, S. Middey, M. Kareev, M. van Veenendaal, E. J. Moon, Jian Liu, B. A. Gray, J. W. Freeland, and J. Chakhalian, *Strain modulated Mott transition in  $\text{EuNiO}_3$  ultra-thin films*, Phys. Rev. B 88, 075116 (2013).
51. S. Middey, **D. Meyers**, M. Kareev, E. J. Moon, B. A. Gray, X. Liu, J. W. Freeland, and J. Chakhalian, *Epitaxial growth of (111)-oriented  $\text{LaAlO}_3/\text{LaNiO}_3$  ultra-thin superlattices*, Appl. Phys. Lett. 101, 261602 (2012).
52. Jian Liu, M. Kareev, **D. Meyers**, B. Gray, P. Ryan, J. W. Freeland, and J. Chakhalian, *Metal-Insulator Transition and Orbital Reconstruction in Mott-Type Quantum Wells Made of  $\text{NdNiO}_3$* , Phys. Rev. Lett. 109, 107402 (2012).

53. W. L. Lim, E. J. Moon, J.W. Freeland, **D. Meyers**, M. Kareev, J. Chakhalian, and S. Urazhdin, *Field-effect diode based on electron-induced Mott transition in NdNiO<sub>3</sub>*, Appl. Phys. Lett. 101, 143111 (2012).
54. M. K. Stewart, Jian Liu, R. K. Smith, B. C. Chapler, C.-H Yee, **D. Meyers**, R. E. Baumbach, M. B. Maple, K. Haule, J. Chakhalian, and D. N. Basov, *Optical probe of strong correlations in LaNiO<sub>3</sub> thin films*, J. Appl. Phys. 110, 033514 (2011).